Application No. 10/840,178 Paper Dated: January 25, 2008

In Reply to USPTO Correspondence of September 25, 2007

Attorney Docket No. 2034-044072

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/840,178

Confirmation No. 7502

Applicants

: ROY H. HAMMERSTEDT et al.

Filed

May 6, 2004

Title

INTERROGATION OF CHANGES IN THE

CONTENTS OF A SEALED CONTAINER

Group Art Unit

1641

Examiner

Christopher L. Chin

Customer No.

28289

MAIL STOP AMENDMENT Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action of September 25, 2007, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

A Petition for one-month extension of time along with the requisite fee is filed concurrently herewith.

I hereby certify that this correspondence is being electronically submitted to the United States Patent and Trademark Office on the date below.

O1/25/2008

Date

Signature

Judy Eberle

Typed Name of Person Signing Certificate

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emitting detectable light of a unique wavelength on excitation by fluorescent resonance transfer by the first fluorescent receptor; b) a combination of a first receptor and a second receptor, the first receptor binding a cell and the second receptor undergoing a detectable spectral change in response to material released by the cell bound to the first receptor; c) a combination of two inhibited fluorescent groups linked by an enzymatic cleavage site, and wherein enzymatic action cleaves the enzymatic cleavage site and releases the fluorescent inhibition; and d) a combination of a first receptor and a second receptor, the first receptor binding a cell capable of releasing an enzyme and the second receptor being an inhibited fluorescent group wherein the enzyme releases the fluorescent inhibition.

(Currently Amended) A sensor device, comprising:

a biosensor comprising a receptor bound on a solid substrate;

a sensor compartment having an interior and an exterior, and enclosing the biosensor, the sensor compartment having a surface allowing external viewing of the biosensor; and

a separation barrier forming at least a portion of the sensor compartment, the separation barrier being selected from the group consisting of a fibril membrane, a microporous membrane and a capillary-pore membrane, the separation barrier having at least one pore allowing fluid communication between the interior and the exterior of the sensor compartment, wherein the biosensor further comprises a bioactive detector molecule and signal material which are each attached to a surface of the biosensor wherein the bioactive detector molecule and signal material are selected from the group consisting of a) a combination of a first fluorescent receptor and a second fluorescent receptor, the second fluorescent receptor emitting detectable light of a unique wavelength on excitation by fluorescent resonance transfer by the first fluorescent receptor; b) a combination of a first receptor and a second receptor, the first receptor binding a cell and the second receptor undergoing a detectable spectral change in response to material released by the cell bound to the first receptor; c) a combination of two inhibited fluorescent groups linked by an enzymatic cleavage site, and wherein enzymatic action cleaves the enzymatic cleavage site and releases the fluorescent inhibition; d) a combination of a first receptor and a second receptor, the first receptor binding a cell capable of releasing an enzyme and the second receptor being an inhibited fluorescent group wherein the enzyme releases the fluorescent

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